

Erin McCarthy

January 24, 2007

The Water Cycle

Overview: This is the second lesson in a series of five that will teach and reinforce the water cycle. Previous to this lesson, students will be introduced to the water cycle and important vocabulary words. Then, over three days, students will rotate through three stations (one per day) that will reinforce the water cycle, while reinforcing many additional skills. On the final day, the students will participate in a review game on the Smartboard. They will also then work in groups to create a bulletin board describing how snow is formed during the water cycle.

Objectives: Students will

- demonstrate understanding of the vocabulary words – condensation, evaporation and precipitation.
- explain and demonstrate that water vapor moves between the Earth and the atmosphere in a continuous cycle
- answer literal and inferential questions about a text
- use what they have learned to create their own illustration, with labels, of the water cycle

Standards:

Standard 4: Science

- Describe the relationships among air, water, and land on Earth
- Describe chemical and physical changes, including changes in states of matter

Standard 2: Language for Literary Response and Expression

- Create their own stories, poems, illustrations or songs using the elements of the literature they have read and appropriate vocabulary

Standard 3: Language for Critical Analysis and Evaluation

- Read and form opinions about a variety of literary and informational texts

Motivation/Warm Up:

- To begin the lesson, students will revisit the 'Water Cycle Song' learned in the previous lesson.
- Teacher will then review the three vocabulary words – condensation, evaporation and precipitation, also learned in the previous lesson. Teacher will review the posters previously made by the three groups that display the vocabulary words, definitions and pictures to explain what each word means.
- Teacher will then display a drawing of the water cycle. Students will then place index cards with the three vocabulary words, at the correct place on the illustration.
- Teacher will then review the sequence graphic organizer that was completed yesterday.

Materials:

- Water cycle posters, science vocabulary books, water cycle nonfiction reading and questions, paper, crayons, markers, Smartboard, group work from previous lessons, water cycle beads, pipe cleaners, 'Water Cycle Song', assorted books about the Water Cycle.

Developmental Procedures:

- After the warm-up, teacher will explain to the students that for the next three days, they will be rotating through three different stations that will help them to better understand the Water Cycle. Teacher will also explain that after all students have worked at each station, they will all get to participate in an experiment where we will be able to see the water Cycle in action.
- Teacher will then explain the three stations. Students will be rotating in the same groups that they used in the previous lesson. The poster displaying the group names- water, sun and clouds, will be displayed in the classroom.
- **Station #1** – Students will work with teacher on a non-fiction reading piece about the water cycle. Students will read the text and then work on answering 'right there,' 'think and search,' and 'on my own' questions about the text.
- **Station #2** – Students will work independently to complete their own sequence graphic organizer.
- **Station #3** – Students will work with foster grandparent to write a poem about the water cycle. Students will then use the poem to create 'Water Cycle' bracelets that will help them to remember the order of the cycle. This will also serve as a home-school connection. Students will be encouraged to explain the bracelet and water cycle to someone at home.
- If students complete any station early, they will work on adding the learned vocabulary words and definitions to their Science Vocabulary books. Additionally, various books on the water cycle will be available for the students to read.

Assessment:

- Students will be assessed informally and formally throughout the lesson. Students will be informally assessed through observation and questioning. Students will be formally assessed through the products that they create. The attached rubric will be used to assess the water cycle pictures that the students create.

Academic Enrichment:

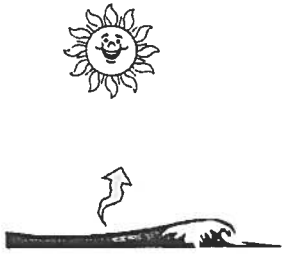
- As a closure activity, students will participate in a review game on the Smartboard. The game will review the process of the water cycle as well as the vocabulary words learned throughout the lesson.
- Also, following this lesson, students will work in groups to create a bulletin board describing how snow is formed during the water cycle. Completed descriptions and illustrations will be displayed in the hallway.

Differentiated Instruction:

- Students will be placed in heterogeneous groups. These groups will be chosen so that each student can display his/her strengths within the group. For the reading comprehension activity, students that are not able to read the passage will use it as a listening activity. The passage can be read to them by a classmate or the teacher.

Name _____ # _____ Date _____

The Water Cycle



The water cycle is the movement of water in the environment by evaporation, condensation and precipitation. The warm sun causes water on the Earth to evaporate and rise up into the sky. When water evaporates it turns from a liquid into a gas called water vapor. The water vapors get very cold in the sky. They condense and form clouds. Condensation is when the water vapor changes back into a liquid. When the liquid drops get too heavy in the clouds, the water falls back down to the Earth. When water falls back down to the Earth it is called precipitation. The water can fall as rain, snow or hail. Then the water cycle starts all over again. The water cycle never ends!

Right There – you can find the answer right in the story. Reread to find the answer. When you find it, highlight it.

1. What causes water on the Earth to evaporate?
 - a. the Earth
 - b. the sun
 - c. the clouds
 - d. none of the above

2. _____ is when the water vapor changes back into a liquid.
 - a. precipitation
 - b. condensation
 - c. evaporation

3. When water falls back to the Earth, it can fall as _____.
 - a. rain
 - b. snow
 - c. hail
 - d. all of the above

Think and Search – you can use the story to help you, but the answer won't be right there in the story.

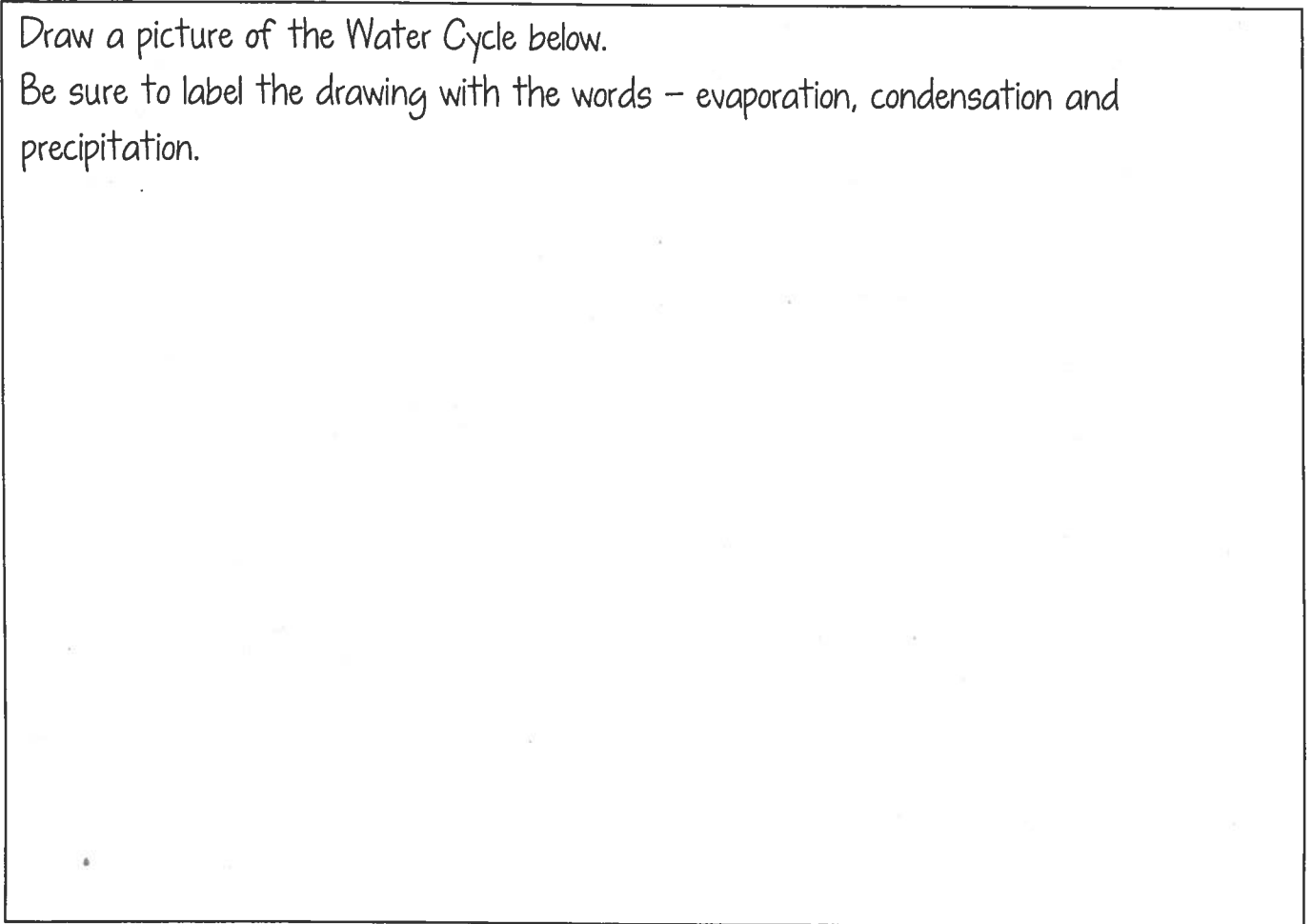
1. Which is the correct order of the states of matter during the water cycle?
 - a. solid, liquid, gas
 - b. liquid, gas, liquid
 - c. solid, gas, liquid

On My Own – The answer is not in the story. You must use what you have learned to answer the question.

1. Why do you think sometimes the precipitation comes back down to the Earth as rain and sometimes as snow? What do you think causes this to happen?

Draw a picture of the Water Cycle below.

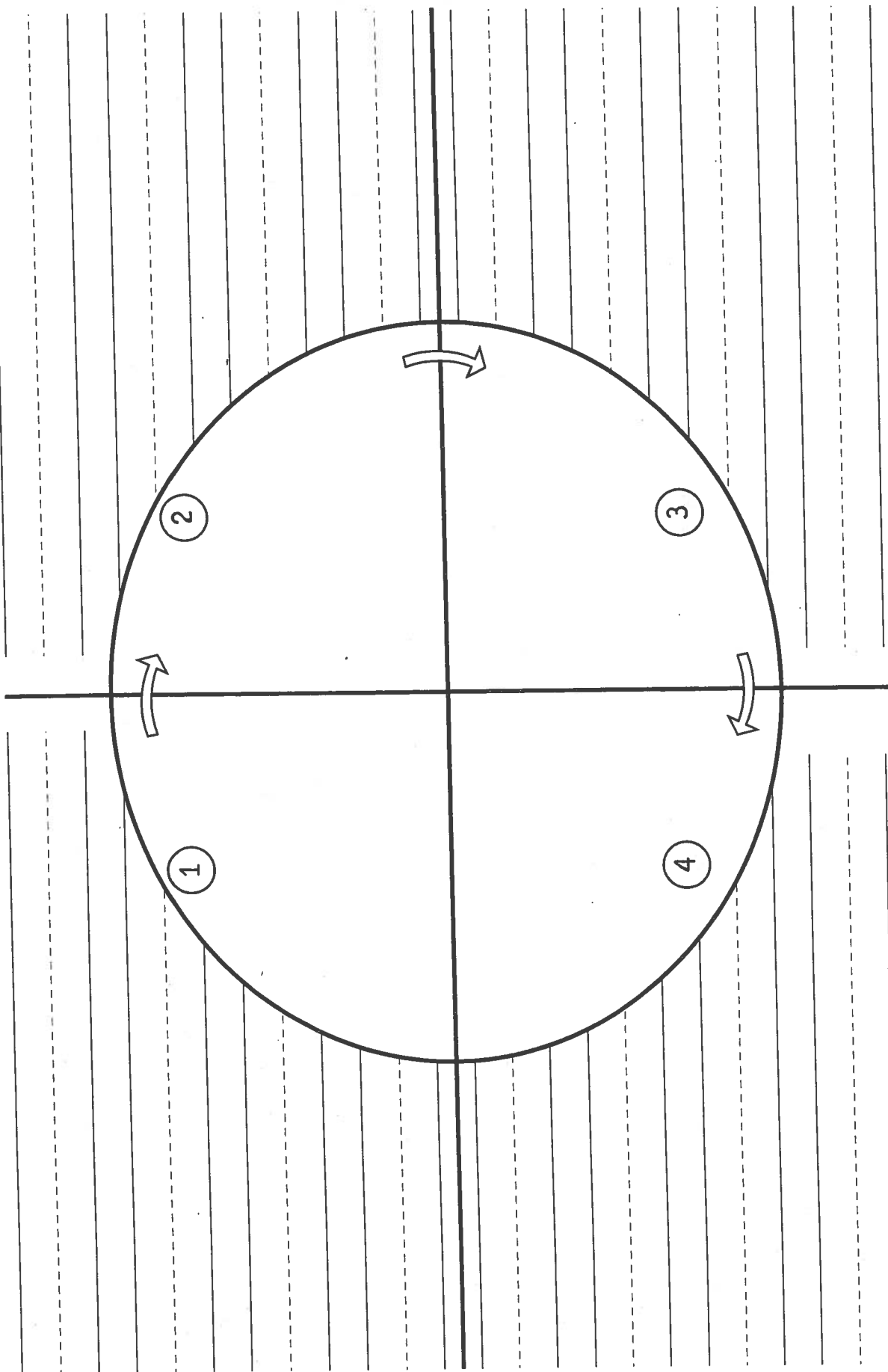
Be sure to label the drawing with the words – evaporation, condensation and precipitation.



Name: _____ Date: _____

Sequence Circle

Title: _____



Name: _____

Date: _____

Nonfiction Vocabulary

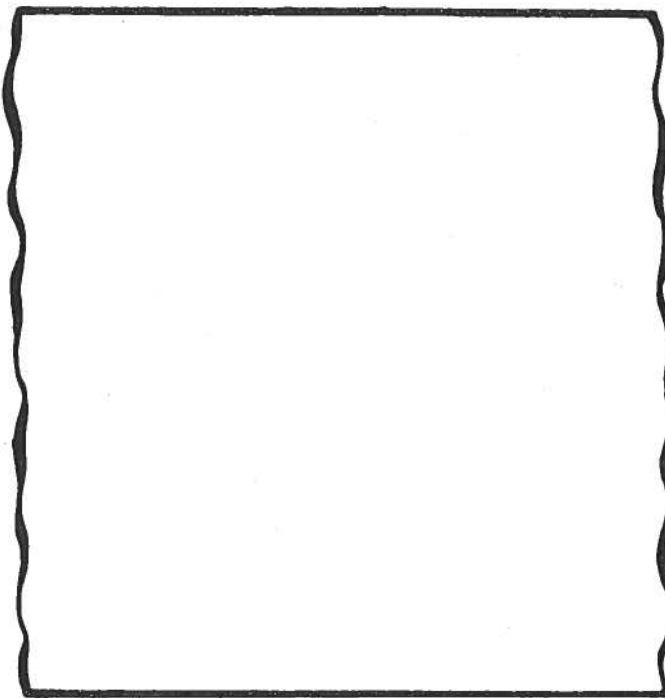
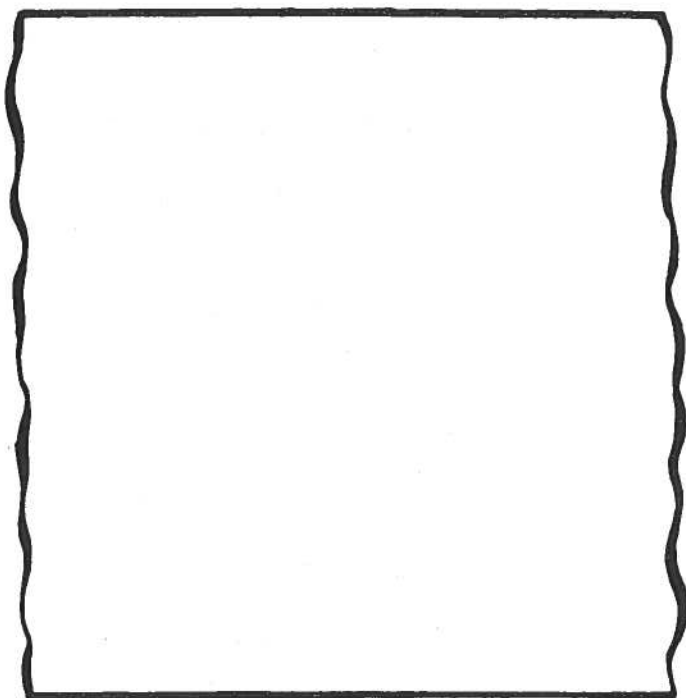
Title: _____

Word

Definition

Word

Definition



The Water Cycle

First, the sun warms up the water on the Earth. Next, the water turns into water vapor and evaporates into the sky. Then, the water vapor condenses and forms clouds. When the drops of water in the clouds get too heavy, precipitation falls back down to the Earth. Then the cycle starts all over again.

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